

UNIVERSITY OF MINNESOTA
THE MEDICAL SCHOOL
MINNEAPOLIS 14

DEPARTMENT OF BACTERIOLOGY
AND IMMUNOLOGY

SEPT 5 1956.

Dear Josh and Esther:

Esther, we greatly appreciated and enjoyed your letter from Woods Hole. The only bad thing is that Josh is anxious to go back again and such missives always bring up the subject. I saw your book review (Josh) in this week's SCIENCE and now have printed evidence: RIT, MIT, PFIT, MUTTON, ETC. Have extended our STREPTOMYCES EMPIRE a little - into the overflow lab. I think that the tissue culture boys are anticipating a mold outbreak any day, even though we are more careful than usual, I'm analyzing more S. coelicolor strains and still haven't any recombination. These things of Sermanti are strange. I had isolated several types before I left Madison:

out of Meth-Hist → Meth-Ura^{il}-
arg-Meth-
isolencing Meth-
and Meth-

out of glut prot → arg-glut-
adenine-arg-
adenine glut-
glut-

and have got some new ones out which so far don't fit the above (although I started to group them out, I don't yet know the results). If these cultures are anything like the original Sermanti's, I don't see how anything can be understood. These are marked strains I don't have so they are not my contaminants.

One thing which really messes up the works.
I can isolate a "parental" out of a heterokaryon
and then carry the "parental" for several

passages and then recover a prototroph which will then give both parents! I wouldn't believe it (and really don't expect anyone else to). About 1 in 20 behaves this way. I thought that they were mutants to prototrophy but. It seems that S. coelicolor carries that other nucleus for a long time - either inactive or in such low population density as to be inactive.

We have started seriously screening for lysogenics ~~XXXXXXXXXX~~. We mean primarily a high school graduate Lilly JONES that starts to the Univ this fall. She will continue part time. Very serious girl - wants to be a Bact. or Chem. If she develops well Esther I would like to have you meet her to discuss problems & advantages she would encounter. Time will tell. Any way - we haven't confirmed any of the reported ones but we haven't given up on them yet. I have picked up one that gives spontaneous plaques and have high hopes but hopes can't transform cells.

Josh, I haven't forgotten the report of this is part II. Part I is the manuscript for J. Bact. I have been ultra cautious in Part II about heterokaryosis - Perhaps much too much so, but don't it. There is a way outside change that (A) PARASEXUALITY would behave that way. Any comments will be appreciated.

Write when you can - come to see us 4320 7th ST NE
Our very best wishes to you and yours MINNEAPOLIS 21

Ray & Lois

P.S. The twins started kindergarten and the children yesterday. Don came home saying that "all we did was stand around" (it was only registration).